

REMARKS

This Amendment responds to the Office Action dated June 14, 2005.

Applicants are appreciative of Examiner's comments regarding the allowability of the claims 10-11 and 15-21 based upon the inclusion of the subject matter recited in any associated base claim and any intervening claims. As such, new independent claim 22 has been added and includes the subject matter of original independent claim 1 and dependent claims 9 and 10. Also, new independent claim 23 has been added and includes the subject matter of original independent claim 1 and dependent claims 2, 3, 5, 6, and 11. Claims 10 and 11 are cancelled. Applicants submit that no new matter has been added, and claims 22 and 23 should be allowed. Additionally, claim 10 has been amended to place it in proper form. Accordingly, claims 1-9 and 12-23 are presently under consideration in this application.

As a result of this amendment, 21 total claims and four independent claims are now present in the application. Applicants submit herewith the fee for the consideration of one additional independent claim and no additional total claims over the three independent claims and 21 total claims paid for with the filing fee. However, if there are any additional fees or refunds required, the Commissioner is directed to charge or debit Deposit Account No. 13-2855 of Marshall, Gerstein & Borun LLP under reference number 06005/36156A. A copy of this paper is included herewith.

35 U.S.C. § 103(a) REJECTIONS

Claims 1-9 and 12-14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Muramatsu (JP 2000-121408) in view of Martel (USP 5, 642,097). Applicants respectfully traverse these rejections. Applicants submit

that in order to establish a *prima facie* case of obviousness, three fundamental criteria must be met: 1) there must be a suggestion or motivation in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings; 2) there must be a reasonable expectation of success; and 3) the prior art reference(s) must teach or suggest all the claim limitations. Based upon the teachings of the cited prior art, Applicants respectfully submit that neither the first nor third criteria have been met. Applicants further assert that the cited references provide no suggestion, motivation, or desirability of doing what the inventor has done, and as such, no *prima facie* case of obviousness has been established.

As originally claimed, independent claim 1 recites “[a] method of monitoring a level of liquid fuel in a tank having a known capacity ... which the fuel is *delivered in gaseous form...comprising...measuring a flow rate of gaseous fuel flowing through the supply line...[to] determin[e] ... [the] remaining liquid fuel level in the tank...*” One skilled in the art appreciates that fuel flowing through the supply line is understood as the mean fuel delivery. Similarly, independent claim 12 recites [a] fuel tank system for storing a fuel in a liquid state and *delivering the fuel in a gaseous state...*” That is, the subject matter claimed is limited to a gaseous state or phase fuel in the delivery and/or flow rate determination. As is known, to support the inference that Applicants’ claimed invention is obvious with respect to the cited references, the references must either be expressly or impliedly suggested the claimed invention or the office action must include a convincing line of reasoning as to why one of ordinary skill in the art would have found

the invention, as claimed, to have been obvious. *See Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). Simply, the cited references present no such line of reasoning.

In regards to Muramatsu, the office action relies upon the abstract for the teachings stating “ [r]egarding claim 1, Muramatsu teaches measuring a flow rate of a gaseous fluid flowing through a supply line.” Similarly relying upon the abstract and the “use” statements on page 1 of the Muramatsu reference, Applicants respectfully submit that the references clearly do not teach measuring the flow rate of a gaseous fluid and that these references are actually limited to liquid fuel metering and level detection. Specifically, under the heading ‘USE’, the art is restricted to measuring liquid fuel quantities in motor vehicle fuel applications. Applicants respectfully submit that at the time of the Muramatsu reference, one skilled in the art would understand that fuel deliveries to motor vehicles and utilization of motor fuel occurs in liquid phase, not gaseous phase. Under Muramatsu, there is no express or implied suggestion of measuring a fuel flow rate in gaseous phase.

Similarly, the teachings of Martel are limited to the delivery, measurement, and alarm generation of fuel oil in liquid phase. That is, the fuel system referenced in Martel is a fuel oil system or “home heating oil”. *See* col. 1, lines 9-30, lines 39-40, and lines 54-56. One skilled in the art appreciates that to achieve gaseous phase of a low vapor pressure liquid, such as fuel oil, the liquid would need to be elevated in temperature or the surrounding pressure or pressure head above the liquid would have to be sufficiently lowered to the inherent vapor pressure of the fuel oil. No such teachings exist.

Therefore, Applicants submit that for at least these reasons there is simply no teaching in the references that would render Applicants' claimed invention obvious, and therefore any rejections based on this proposed combination of references should be withdrawn. Accordingly, claim 1-9 and 12-14 are allowable over the cited prior art.

Additionally claim 12 recites in part " a report station communicatively coupled to the flow sensor by the communication link to receive the fuel flow information, the report station including *a controller having a memory programmed to schedule a delivery of fuel in response to the fuel flow information.*" Clearly, neither Muramatsu nor Martel suggests, in any manner, the scheduling of fuel delivery in response to fluid flow information as described and claimed by the Applicants. The prior art must disclose at least a suggestion of an incentive for a claimed combination of elements in order to establish a *prima facie* case of obviousness. No such suggestion is apparent from either of the cited references, and consequently, the obviousness rejection must be withdrawn. *See In re Sernaker*, 217 U.S.P.Q. 1 (Fed. Cir. 1983); *see also Ex parte Clapp* at 973.

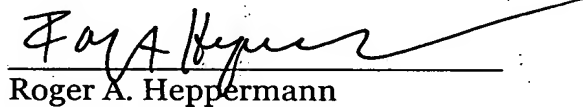
CONCLUSION

For the reasons stated above, Applicants submit that the specification and the claims are in proper form and clearly define patentable subject matter with respect to the prior art. As such, reconsideration and allowance of the claims are respectfully requested.

Respectfully submitted,

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